

IN THE CLAIMS:

Amended claims follow:

1. – 3. (Cancelled)

4. (Currently Amended) The method of claim 3, A method for enhancing network throughput between an internal network and an external network to which one or more servers are connected, comprising the steps of:

providing a firewall between the internal network and the external network;
opening a plurality of TCP connections between said firewall and one or more of the servers,
each said TCP connection having a TCP control block;
creating a common TCP control block for a group of TCP connections through said firewall
to the same server; and

placing connection state data shared by each said TCP connection into said common TCP
control block, wherein each individual said TCP control block includes a pointer to the CCB for said
shared connection state data;

wherein said steps further comprise connecting said firewall to one or more additional
firewalls with an internal network, and sharing said common TCP control block with one or more of
said additional firewalls connected to said firewall;

wherein said sharing step is performed by pushing said common TCP control block from one
of said firewalls to one or more of said additional firewalls;

wherein said pushing takes place at periodic intervals.

5. – 6. (Cancelled)

7. (Currently Amended) The method of claim 6, A method for enhancing network throughput between an internal network and an external network to which one or more servers are connected, comprising the steps of:

providing a firewall between the internal network and the external network;

opening a plurality of TCP connections between said firewall and one or more of the servers,
each said TCP connection having a TCP control block;

creating a common TCP control block for a group of TCP connections through said firewall
to the same server; and

placing connection state data shared by each said TCP connection into said common TCP
control block, wherein each individual said TCP control block includes a pointer to the CCB for said
shared connection state data;

wherein said steps further comprise connecting said firewall to one or more additional
firewalls with an internal network, and sharing said common TCP control block with one or more of
said additional firewalls connected to said firewall;

wherein said sharing step is performed by pulling said common TCP control block to one
firewall from one or more of said other firewalls;

wherein said pulling takes place at periodic intervals.

8. (Currently Amended) The method of claim 6, A method for enhancing network throughput
between an internal network and an external network to which one or more servers are connected,
comprising the steps of:

providing a firewall between the internal network and the external network;

opening a plurality of TCP connections between said firewall and one or more of the servers,
each said TCP connection having a TCP control block;

creating a common TCP control block for a group of TCP connections through said firewall
to the same server; and

placing connection state data shared by each said TCP connection into said common TCP
control block, wherein each individual said TCP control block includes a pointer to the CCB for said
shared connection state data;

wherein said steps further comprise connecting said firewall to one or more additional
firewalls with an internal network, and sharing said common TCP control block with one or more of
said additional firewalls connected to said firewall;

wherein said sharing step is performed by pulling said common TCP control block to one
firewall from one or more of said other firewalls;

wherein one of said firewalls initiates said pulling before said firewall attempts to open a new TCP connection.

9. (Currently Amended) The method of claim 27, further comprising the step of storing said one or more common TCP control blocks received from one or more of said other firewalls.

10. (Currently Amended) The method of claim 27, further comprising the step of adjusting the connection rate and data throughput through one said firewall based on the connection rate and data throughput through said one or more other firewalls, as determined from said one or more common TCP control blocks received from said one or more other firewalls.

11. (Currently Amended) The method of claim 27, further comprising the step of providing a single physical point of contact between the internal network and the external network.

12. (Currently Amended) The method of claim 27, further comprising the step of adjusting the connection rate and data throughput of one or more said TCP connection through one said firewall based on the connection rate and data throughput of one or more said other firewalls, as determined from said common TCP control blocks.

13. (Currently Amended) The method of claim 27, further comprising the step of deleting one of said common TCP control blocks associated with an individual firewall a substantially fixed period of time after said common TCP control block was created.

14. (Currently Amended) The method of claim 27, further comprising the step of deleting one of said common TCP control blocks associated with an individual firewall a substantially fixed period of time after said common TCP control block was received from another said firewall.

15. (Currently Amended) The method of claim 17, further comprising the step of deleting one of said common TCP control blocks from one of said firewalls if said common TCP control block has not been used by said one of said firewalls for a substantially fixed period of time.

Schulke 16. (Original) The method of claim 15, wherein said period of time is substantially equivalent to the TCP maximum segment lifetime.

CNA 17. (Currently Amended) The method of claim 17, wherein said firewall is a proxy server.

18. (Currently Amended) The method of claim 17, further comprising the step of adjusting the connection rate and data throughput of one said TCP connection through said firewall based on the connection rate and data throughput of said other TCP connections, as determined from said common TCP control blocks.

B 19. (Currently Amended) The method of claim 17, wherein said common TCP control block created for said firewall is stored in said firewall.

20. - 22. (Cancelled)

23. (Currently Amended) The method of claim 22, further comprising the steps of A method for enhancing network throughput between an internal network and an external network to which a server is connected, comprising the steps of:

connecting two or more firewalls to the internal network;

determining whether a common TCP control block exists for a TCP connection between one of said firewalls and the server, and creating one if one does not exist;

sending a TCP connection request to the server from one of said firewalls; and

updating said common TCP control block based on the response from the server to said TCP connection request

wherein said steps further comprise establishing a connection between said firewall and said server, and updating said common TCP control block with connection state data during said connection;

wherein said steps further comprise shutting down said connection, and updating said common TCP control block based on the type of shutdown performed.

24. (Currently Amended) The method of claim 243, further comprising the step of sharing said common TCP control block with one or more of said other firewalls.

25. – 27. (Cancelled)

B 28. (Currently Amended) The method of claim 27, further comprising the steps of A method for enhancing network throughput between an internal network and an external network to which a server is connected, comprising the steps of:

connecting two or more firewalls to the internal network;
receiving a TCP connection request from the server to one of said firewalls;
determining whether a common TCP control block exists for a TCP connection between said receiving firewall and said server, and creating one if one does not exist; and
updating said common TCP control block based on the TCP connection request from the server.

wherein said steps further comprise transmitting an acknowledgement and a request for connection to the server, and updating said common TCP control block with the resulting connection state data;

wherein said steps further comprise establishing a connection between said firewall and the server and updating said common TCP control block during said connection with connection state data;

wherein said steps further comprise shutting down said connection, and updating said common TCP control block based on the type of shutdown performed.

29. (Currently Amended) The method of claim 258, further comprising the step of sharing said common TCP control block with one or more of said other firewalls.

30-35. (Cancelled)